EPA Region 5 Records Ctr.

WA # 239-RSBD-05XX

STATEMENT OF WORK FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY OVERSIGHT Sauget Area 1 Site, Sauget, St. Clair County, IL

February 6, 2004

Introduction

Site Description

The Sauget Area 1 Site (SA1S) consists of Segments A through F of Dead Creek, and adjacent Sites (G,H,I,L,M, and N). Dead Creek is an intermittent creek, sometimes impounded, which was formerly used during the 1930s and before for waste disposal. The creek segments included in the site stretch over 3.5 miles.

Site G - is approximately 5 acres in size and was operated and served as a disposal area for oil, drums containing wastes, paper wastes, documents and lab equipment from sometime after 1940 to the late 1980s. Intermittent dumping continued until 1988, when most of the site was fenced pursuant to a USEPA removal action under CERCLA. Wastes located on the surface and/or in the subsurface of Site G spontaneously combusted and/or burned for long periods of time on several occasions prior to the second removal action conducted at the site by USEPA in 1995. This removal action involved the excavation of PCB, organics, metals, and dioxin contaminated soils on and surrounding Site G, solidification of open oil pits on the site, and covering part of the site (including the excavated contaminated soils) with a clean soil cap approximately 18 to 24 inches thick. Waste was removed up to the foundation of the Wiese Engineering facility, which is located west of the fenced portion of Site G. The fenced portion of the site is vegetated. The estimated volume of waste in Site G is 139,715 cubic yards.

Site H - occupies approximately 5 acres of land and is connected to Site I under Queeny Avenue and together they were known to be part of the Sauget-Monsanto Landfill, which operated from approximately 1931 to 1957. Site H is not currently being used and the property is graded and grass-covered. Due to the physical connection to Site I, waste disposal at Site H was similar to that at Site I. Chemical wastes were disposed of here from approximately 1931 to 1957. Wastes included drums of solvents, other organics and inorganics, including PCBs, para-Nitroaniline, Chlorine, Phosphorous Pentasulfide, and Hydrofluosilic Acid. Municipal wastes were also reportedly disposed of at Site H. The estimated volume of waste in Site H is 168,432 cubic yards.

Site I - was estimated to occupy approximately 19 acres of land. The site is currently graded and covered with crushed stone and is used for equipment and truck parking. Site I was originally used as a sand and gravel pit that received industrial and municipal wastes. Site I is connected to Site H (see above). The landfill operated from approximately 1931 to 1957. Site I served as a disposal area for contaminated sediments from historic dredgings of Dead Creek Segment A. This site accepted chemical wastes from approximately 1931 to the late 1950s. Municipal wastes were also disposed of in Site I. Site I is estimated to contain 680,827 cubic yards of contaminated wastes and fill material.

Site L - is the former location of two surface impoundments used from approximately 1971 to 1981 for the disposal of wash water from truck cleaning operations. Drums, drum fragments and uncontained solid waste were discovered in Site L test trenches during the EE/CA investigation (O'Brien & Gere, 2000). This site is now covered by black cinders and is used for equipment storage. The volume of contaminated fill material in Site L is 18,069 cubic yards.

Purpose

The purpose of this Statement of Work (SOW) is to set forth the requirement for completing oversight of the PRP's Remedial Investigation/Feasibility Study (RI/FS) at the Site. This include oversight of DNAPL investigation and other RIFS of remedial activities, the review the revised RI/FS and risk

assessment reports and other technical documents and workplans. This SOW is designed to provide the framework for conducting and completing the RI/FS Oversight activities at the Sauget Area 1 Site.

General Requirements

A summary of the major deliverables and a suggested schedule for submittals are attached (Attachment 1).

Specifically, the PRP's RI/FS involves the investigation and study of wastes, soil, groundwater, surface water, and sediments.

The contractor shall furnish all necessary and appropriate personnel, materials, and services needed for, or incidental to, overseeing the RI/FS.

A list of primary guidance and reference material is attached (Attachment 2). In all cases, the contractor shall use the most recently issued guidance.

The contractor shall communicate at least weekly with the Work Assignment Manager or Remedial Project Manager (WAM/RPM), either in face-to-face meetings or through conference calls.

The contractor shall notify the WAM/RPM when 75 percent of the approved work assignment budget has been expended and when 95 percent has been expended.

EPA will provide oversight of contractor activities throughout the RI/FS. EPA review and approval of deliverables is a tool to assist this process and to satisfy, in part, EPA's responsibility to provide effective protection of public health, welfare, and the environment. EPA will review deliverables to assess the likelihood that the RI/FS will achieve its goals and that its performance requirements have been met. Acceptance of deliverables by EPA does not relieve the contractor of responsibility for the adequacy of the deliverables.

Record-Keeping Requirements

The contractor shall maintain all technical and financial records for the RI/FS in accordance with the contract.

Equipment Transfer - N/A

USEPA Primary Contact

The primary contact for this work assignment is Nabil Fayoumi who is the Work Assignment Manager (WAM). The WAM can be reached at (312) 886-6840 or via telefax at (312) 886-4071 or via the Internet at fayoumi.nabil@epa.gov. The secondary contact is Steve Nathan. He can be reached at (312) 886-5496 or via telefax at (312) 886-5496 or via the Internet nathan.steve@epa.gov. The mailing address is U.S. EPA Region V, Mailcode: SR-6J, 77 West Jackson Blvd., Chicago IL 60604

WA Completion Date & Project Closeout

The completion date for this work assignment is estimated to be October 30, 2005. At the completion of the work assignment, the contractor shall perform all necessary project work assignment closeout activities as specified in the Contract. These activities may include closing out any subcontracts, indexing and consolidating project records and files as required above, and providing a technical and

financial closeout report to USEPA. Final costs shall be reported to EPA (on disk) broken down into the cost for each element of the Work Breakdown Structure (WBS) for this work assignment.

Task 1 Project Planning and Support

The purpose of this task is to determine how the RI/FS will be managed and controlled. The following activities shall be performed as part of the project planning task:

- 1.1 Project Planning. This task includes efforts related to project initiation.
 - Attend Kickoff Meeting. The contractor shall contact the RPM within 5 calendar days after receipt of the work assignment to schedule the kickoff meeting. The contractor shall participate in a kickoff conference call after receipt of the work assignment. It is anticipated that 2 3 contractor personnel will participate in the conference
 - Conduct Site Visit, N/A
 - Evaluate Existing Information. The contractor shall obtain, copy, and review available information pertaining to the site from USEPA. The contractor shall obtain the necessary information from the RPM. The contractor shall evaluate the existing data and documents, including: PRPs Work Plans for DNAPL investigation and Dead Creek characterization and remediation investigation, review of the revised EECA/RI/FS reports and other technical documents, workplans, and data.
 - Develop RI/FS Oversight Work Plan. The contractor shall prepare and submit a RI/FS Oversight Work Plan within 21 calendar days after receipt of the work assignment (WA). The contractor shall use information from the USEPA-approved PRP Work Plan, appropriate USEPA guidance, and technical direction provided by the USEPA WAM/RPM as the basis for preparing the RI/FS Oversight Work Plan. RI/FS oversight work must be coordinated and properly sequenced with USEPA and PRP RI/FS activities. The contractor shall submit one copy of the work plan to the Contracting Officer (CO), Project Officer (PO) and Work Assignment Manager (WAM).

Develop Narrative. The RI/FS Oversight Work Plan shall include a comprehensive description of project tasks, the procedures to accomplish them, project documentation, and project schedule. The contractor shall use their quality assurance/quality control (QA/QC) systems and procedures to assure that the work plan and other deliverables are of professional quality requiring only minor revisions. Specifically, the Work Plan shall include the following:

- ♦ Identification of RI/FS project elements and the associated oversight tasking including review of PRP planning, design, and activity reporting documentation; field sampling and analysis activities, and treatability study activities. Output of this task will be a detailed work breakdown structure of the RI/FS oversight project.
- ♦ The contractor's technical approach to each task to be performed, including a detailed description of each task; the assumptions used; any information to be produced during and at the conclusion of each task; and a description of the work products that will be submitted to USEPA. Information shall be presented in a sequence consistent with SOW.

- ♦ A schedule with specific dates for completion of each required activity and submission of each deliverable required by the SOW. This schedule shall also include information regarding timing, initiation, and completion of all critical path milestones for each activity and deliverable and the expected review time for USEPA.
- ♦ A list of key contractor personnel providing support on the work assignment.
- Attend Fact Finding/Negotiation Meeting. The contractor shall attend a Work Plan fact
 finding/negotiation meeting at the Region 5 office. USEPA and the Oversight Contractor will
 discuss and agree upon the final technical approach and costs required to accomplish the tasks
 outlined in the SOW.
 - Prepare & Submit Revised Oversight Work Plan. The contractor shall prepare and submit a revised work plan incorporating the agreements made in the fact finding/negotiation meeting.
 - Review PRP Plans. N/A

1.2 Project Management

The contractor shall perform general work assignment management including management and tracking of costs, preparation of Monthly Progress Reports, attendance at project meetings, and preparation and submittal of invoices. It is anticipated that the period of performance for this project is from January 2004 through October 2005.

If the contractor finds that the RI/FS activities differ significantly from the approved RI/FS project plans at any point in the process, the contractor shall notify the WAM/RPM immediately to describe the issue.

- Monthly Project Management and Reporting. The contractor shall provide general work assignment management and coordination to implement the work assignment SOW. The contractor shall prepare monthly progress reports in accordance with the requirements under the contract. The contractor shall manage and track costs and prepare and submit invoices. The contractor shall report costs and level of effort (by P-level) for the reporting period as well as cumulative amounts expended to date.
- Meetings. N/A
- Team or Pool Subcontract Management. If the contractor proposes utilization of a team or pool subcontractor to implement any portion of the work outlined in this SOW, the contractor shall incorporate the effort associated with management of the team or pool subcontractor under this SOW element.
- 1.3 Subcontract Procurement and Support Activities. N/A

Task 2 Community Relations Technical Support

This task includes technical support provided by the contractor during public/availability meeting(s) under the associated community relations work assignment. The contractor shall provide community relations support to USEPA throughout the RI/FS in accordance with *Community Relations in Superfund—A Handbook*, June 1988. For budgeting purposes the contractor shall assume that 2 staff will provide technical support at 4 public/availability meeting(s) and are expected to spend 4 hours per meeting including travel.

Task 3 Data Acquisition Oversight

This task involves oversight of work efforts related to sampling during the RI/FS. The planning for this task is accomplished in Task 1, Project Planning and Support, whereby all of the necessary plans required to collect the field data are determined and arranged. This task begins with USEPA's approval of the PRP's workplan prior to RI/FS investigation and ends with the demobilization of field personnel and equipment from the site after the RI/FS investigation is complete.

The contractor shall perform the following field activities or a combination of activities for the field investigation effort in accordance with the USEPA-approved workplans.

- Mobilization and Demobilization Oversight. N/A
- Perform Field Investigation Oversight. The contractor shall oversee all field investigation activities conducted by the PRPs to ensure that the work is being conducted in accordance with the approved work plans. The contractor shall also insure that the PRP characterizes and disposes of investigation-derived wastes in accordance with local, State and Federal regulations as specified in the FSP (see the Fact Sheet Guide to Management of Investigation-Derived Wastes, 9345.3-03FS, January 1992). The contractor shall use the approved work plan schedule to determining the contractors needs to provide field oversight. However, if the work plan schedule has not been approved prior to development of the contractor's work plan, the contractor shall assume that the PRP field investigation will take place over a period of 18 weeks. The contractor shall assume 50 hours/week of field oversight for each person conducting field oversight. It is anticipated that during the most of the oversight work only 1 contractor personnel will be necessary for conducting the field oversight. The contractor shall provide verbal communication to the RPM at least once per week during the PRP's field work.
- Periodic Field Oversight Reports. The contractor shall provide a short field oversight report once every week during the duration of the PRP's field work. The contractor's field oversight reports shall consist of a short summary of significant field events during the previous week. Every month, the contractor shall submit any photographs taken during the period, and a copy of all field logs. This monthly field oversight report shall be submitted 14 calendar days after each 4 week period. No Final Summary Report shall be prepared.
- Task 4 Analysis of Split Samples N/A
- Task 5 Analytical Support and Data Validation of Split Samples N/A
- Task 6 Data Evaluation of Split Samples N/A

Task 7 Review of PRP Risk Assessment

The Risk Assessment will determine whether site contaminants pose a current of potential risk to human health and the environment in the absence of any remedial action. The contractor shall address the contaminant identification, exposure assessment, toxicity assessment, and risk characterization. The Risk Assessment will be used to determine whether remediation is necessary at the site, provide justification for performing remedial action, and determine what exposure pathways need to be remediated.

• Human Health Risk Assessment. The contractor shall review and provide comments on the PRP's evaluation and assessment of the risk to human health posed by site contaminants. The contractor shall review the PRP's draft and final Human Health Risk Assessment Reports that addressthe following:

- Hazard Identification (sources). The contractor shall review available information on the hazardous substances present at the site and identify the major contaminants of concern.
- Dose-Response Assessment. Contaminants of concern should be selected based on their intrinsic toxicological properties.
- Prepare Conceptual Exposure/Pathway Analysis. Critical exposure pathways (e.g., drinking water) shall be identified and analyzed. The proximity of contaminants to exposure pathways and their potential to migrate into critical exposure pathways shall be assessed.
- Characterization of Site and Potential Receptors. The contractor shall identify and characterize human populations in the exposure pathways.
- Exposure Assessment. The exposure assessment will identify the magnitude of actual or potential human exposures, the frequency and duration of these exposures, and the routes by which receptors are exposed. The exposure assessment shall include an evaluation of the likelihood of such exposures occurring and shall provide the basis for the development of acceptable exposure levels. In developing the exposure assessment, the contractor shall develop reasonable maximum estimates of exposure for both current land use conditions and potential land use conditions at the site.
- Risk Characterization. During risk characterization, chemical-specific toxicity information, combined with quantitative and qualitative information from the exposure assessment, shall be compared to measured levels of contaminant exposure levels and the levels predicted through environmental fate and transport modeling. These comparisons shall determine whether concentrations of contaminants at or near the site are affecting or could potentially affect human health.
- Identification of Limitations/Uncertainties. The contractor shall identify critical assumptions (e.g., background concentrations and conditions) and uncertainties in the report.
- Site Conceptual Model. Based on contaminant identification, exposure assessment, toxicity assessment, and risk characterization, the contractor shall develop a conceptual model of the site.
- Ecological Risk Assessment. The contractor shall evaluate and assess the PRP's draft and final Ecological Risk Assessment Reports. The contractor shall review the PRP's draft Ecological Risk Assessment Report that addresses the following:
 - Hazard Identification (sources). The contractor shall review available information on the hazardous substances present at the site and identify the major contaminants of concern.
 - Dose-Response Assessment. Contaminants of concern should be selected based on their intrinsic toxicological properties.
 - Prepare Conceptual Exposure/Pathway Analysis. Critical exposure pathways (e.g., surface water) shall be identified and analyzed. The proximity of contaminants to exposure pathways and their potential to migrate into critical exposure pathways shall be assessed.
 - Characterization of Site and Potential Receptors. The contractor shall identify and characterize environmental exposure pathways.
 - Select Chemicals, Indicator Species, and End Points. In preparing the assessment, the contractor will select representative chemicals, indicator species (species that are especially sensitive to environmental contaminants), and end points on which to concentrate.
- Exposure Assessment. The exposure assessment will identify the magnitude of actual or environmental exposures, the frequency and duration of these exposures, and the routes by which receptors are exposed. The exposure assessment shall include an evaluation of the likelihood of such exposures occurring and shall provide the basis for the development of acceptable exposure levels. In developing the exposure assessment, the contractor shall develop reasonable maximum estimates of exposure for both current land use conditions and potential land use conditions at the site.
 - Toxicity Assessment/Ecological Effects Assessment. The toxicity and ecological effects assessment will address the types of adverse environmental effects associated with chemical exposures, the relationships between magnitude of exposures and adverse effects, and the related

- uncertainties for contaminant toxicity (e.g., weight of evidence for a chemical's carcinogenicity).
- Risk Characterization. During risk characterization, chemical-specific toxicity information, combined with quantitative and qualitative information from the exposure assessment, shall be compared to measured levels of contaminant exposure levels and the levels predicted through environmental fate and transport modeling. These comparisons shall determine whether concentrations of contaminants at or near the site are affecting or could potentially affect the environment.
- Identification of Limitations/Uncertainties. The contractor shall identify critical assumptions (e.g., background concentrations and conditions) and uncertainties in the report.
- Site Conceptual Model. Based on contaminant identification, exposure assessment, toxicity assessment, and risk characterization, the contractor shall develop a conceptual model of the site

Task 8 Treatability Study and Pilot Testing Oversight N/A

Task 9 Review the PRP's Remedial Investigation Report

The contractor shall review the PRP's Remedial Investigation Report.

- Review PRP's Draft RI Report. The contractor shall review and provide comments on the PRP's Draft RI Report 21 days after receipt of PRP's Draft RI Report.
- Review PRP's Final RI Report. The contractor shall review and provide comments on the PRP's Final RI Report 21 days after receipt of PRP's Final RI Report.

Task 10 Review PRP's Remedial Alternatives Screening

The PRP shall investigate those hazardous waste management alternatives that will remediate or control contaminated media (soil, surface water, ground water, sediments) remaining at the site, as deemed necessary in the RI, to provide adequate protection of human health and the environment. The potential alternatives should encompass, as appropriate, a range of alternatives in which treatment is used to reduce the toxicity, mobility, or volume of wastes but vary in the degree to which long-term management of residuals or untreated waste is required, one or more alternatives involving containment with little or no treatment; and a no-action alternative. Alternatives that involve minimal efforts to reduce potential exposures (e.g., site fencing, deed restrictions) should be presented as "limited action" alternatives.

- Review PRP's Draft Technical Memorandum. The contractor shall review the PRP's draft Technical Memorandum within 7 calendar days after receipt of the document, presenting the potential alternatives and including the following information:
 - Establish Remedial Action Objectives. Based on existing information, the contractor shall review the PRP's site-specific remedial action objectives which should be developed to protect human health and the environment. The objectives should specify the contaminant(s) and media of concern, the exposure route(s) and receptor(s), and an acceptable contaminant level or range of levels for each exposure route (i.e., preliminary remediation goals).
 - Establish General Response Actions. The contractor will review the PRP's proposed general response actions for each medium of interest by defining contaminant, treatment, excavation, pumping, or other actions, singly or in combination to satisfy remedial action objectives. The

- response actions should take into account requirements for protectiveness as identified in the remedial action objectives and the chemical and physical characteristics of the site.
- Identify & Screen Applicable Remedial Technologies. The contractor shall review the PRP's proposed technologies based on the developed general response actions. Hazardous waste treatment technologies should be identified and screened to ensure that only those technologies applicable to the contaminants present, their physical matrix, and other site characteristics will be considered. This screening will be based primarily on a technology's ability to effectively address the contaminants at the site, but will also take into account a technology's implementability and cost. The contractor shall review the PRP's selected representative process options, as appropriate, to carry forward into alternative development. The contractor will identify the need for treatability testing for those technologies that are probable candidates for consideration during the detailed analysis.
- The contractor shall review the PRP's Remedial Alternatives in accordance with NCP.
- The contractor shall review the PRP's Remedial Alternatives for Effectiveness, Implementability, and Cost. The contractor shall review the alternatives to identify the potential technologies or process options that will be combined into media-specific or site-wide alternatives. The developed alternatives shall be defined with respect to size and configuration of the representative process options; time for remediation; rates of flow or treatment; spatial requirements; distances for disposal; and required permits, imposed limitations, and other factors necessary to evaluate the alternatives. If many distinct, viable options are available and developed, the Research Engineer will screen the alternatives that undergo the detailed analysis to provide the most promising process options. The alternatives should be screened on a general basis with respect to their effectiveness, implementability, and cost.
- Review the PRP's Final Technical Memorandum. The contractor shall review the PRP's Final Technical Memorandum within 14 calendar days after receipt of the PRP's document.

Task 11 Review PRP's Remedial Alternatives Evaluation

The contractor shall review and provide comments on the PRP's Remedial Alternatives Evaluation within 14 calendar days after receipt of the PRP's document. The review shall include: (1) a technical description of each alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative; and (2) a discussion that profiles the performance of that alternative with respect to each of the evaluation criteria.

Task 12 Review PRP's FS Report

The Contractor shall review the PRP's Feasibility (FS) Report consisting of a detailed analysis of alternatives and cost-effectiveness analysis in accordance with NCP 300.68(h)(3)(I)(2). The report shall contain a summary of alternative remedial actions in accordance with Chapter 3, NCP 300.68(h)(3)(I)(2)(A); 2) Cost Analysis in accordance with Chapter 7, NCP 300.68(h)(3)(I)(2)(B); 3) Institutional analysis in accordance with Chapter 4, NCP 300.68(h)(3)(I)(2)(C); 4) Public-health analysis in accordance with Chapter 5, NCP 300.68(h)(3)(I)(2)(D); 5) Environmental analysis in accordance with Chapter 6, NCP 300.68(h)(3)(I)(2)(E).

- Review PRP's Draft FS Report. The contractor shall review and provide comments on the PRP's draft FS Report within 21 calendar days after receipt of the document. The review of the FS Report should include a review of the following:
 - Summarizes Feasibility Study Objectives
 - Summarizes Remedial Objective
 - ▶ Articulate General Response Action
 - Identification & Screening of Remedial Technologies

- Remedial Alternatives Description
- Detailed Analysis of Remedial Alternatives. The contractor's technical feasibility considerations shall include the careful study of any problems that may prevent a remedial alternative from mitigating site problems. Therefore, the site characteristics from the RI must be kept in mind as technical feasibility of the alternative is studied. Specific items to be addressed are reliability (operation over time), safety, operation and maintenance, ease with which the alternative can be implemented, and time needed for implementation.
- Summary and Conclusions
- Review of PRP's Final FS Report. The contractor shall review and provide comments on the PRP's Final FS Report within 21 calendar days after receipt of the document.

Task 13 Post RI/FS Support

The contractor shall provide technical support required for preparation of the ROD for the site. The contractor's support may include the following support activities: attendance at public meetings, briefings, & technical meetings with PRPs, review of presentation materials, technical assistance on review of the Responsiveness Summary and Proposed Plan & ROD, and any review of the a Feasibility Study Addendum. The contractor shall assume 250 LOE for this task.

Task 14 Administrative Record N/A

Task 15 Work Assignment Closeout

The contractor shall perform the necessary activities to close outwork assignment in accordance with contract requirements.

- Package and Return Documents to Government. The contractor shall package and return all documents to EPA.
- Prepare Closeout Report. The contractor shall prepare a Work Assignment Closeout Report (WACR). The WACR shall include all LOE by p-level and costs in accordance with the WBS. The contractor shall provide an electronic copy of the most recent mailing list to the WAM concurrent with submittal of the WACR.

Attachment 1 Summary of Major Submittals for the Remedial Investigation/Feasibility Study at Sauget Area 1 Site

TASK	DELIVERABLE	NO. OF COPIES	DUE DATE (calendar days)
1.1	RI/FS Oversight Work Plan	3	21 days after initiation of work assignment (WA)
1.1	Revised RI/FS Work Plan	3	14 days after receipt of EPA comments or Negotiation Meeting
1.2	Monthly Progress Reports	3	in accordance with the contract requirements
3	Weekly Field Investigation Reports	2	3 days after each week period
3	Monthly Field Investigation Final Summary Report	2	14 days after after each 4 week period
7	Draft Human Health Risk Assessment Report	3	21 days after receipt of PRP's Draft HHRA Report
7	Final Human Health Risk Assessment Report	3	21 days after receipt of PRP's Final HHRA Report
7	Draft Ecological Risk Assessment Report	3	21 days after completion of field investigations
7	Final Ecological Risk Assessment Report	3	21 days after receipt of EPA comments
9	Comments on PRP's Draft RI Report	3	21 days after receipt of PRP's Draft RI Report
9	Comments on PRP's Final RI Report	3	21 days after receipt of PRP's Final RI Report
10	Comments on PRP's Draft Remedial Alternatives Technical Memorandum	3	7 days after receipt of PRP's Draft Technical Memorandum
10	Comments on PRP's Final Remedial Alternatives Technical Memorandum	3	14 days after receipt of PRP's Final Technical Memorandum
11	Comments on PRP's Remedial Alternatives Evaluation	3	14 days after receipt of PRP's Remedial Alternatives Evaluation
12	Comments on PRP's Draft Feasibility Study Report	3	21 days after receipt of PRP's Draft FS Report
12	Comments on PRP's Final Feasibility Study Report	3	21 days after receipt of PRP's Final FS Report

Attachment 1 Summary of Major Submittals for the Remedial Investigation/Feasibility Study at Sauget Area 1 Site

TASK	DELIVERABLE	NO. OF COPIES	DUE DATE (calendar days)
15	Work Assignment Completion Report	3	as directed in the Work Assignment Closeout Notification

Attachment 2 Regulations and Guidance Documents

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process:

- 1. American National Standards Practices for Respiratory Protection. American National Standards Institute Z88.2-1980, March 11, 1981.
- 2. ARCS Construction Contract Modification Procedures September 89, OERR Directive 9355.5-01/FS.
- 3. CERCLA Compliance with Other Laws Manual, Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (DRAFT), OSWER Directive No. 9234.1-01 and -02.
- 4. Community Relations in Superfund A Handbook, U.S. EPA, Office of Emergency and Remedial Response, June 1988, OSWER Directive No. 9230.0-3B.
- 5. A Compendium of Superfund Field Operations Methods, Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.
- 6. Construction Quality Assurance for Hazardous Waste Land Disposal Facilities, U.S. EPA, Office of Solid Waste and Emergency Response, October 1986, OSWER Directive No. 9472.003.
- 7. Contractor Requirements for the Control and Security of RCRA Confidential Business Information, March
- 8. Data Quality Objectives for Remedial Response Activities, U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.
- 9. Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual, U.S. EPA Region IV, Environmental Services Division, April 1, 1986 (revised periodically).
- 10. EPA NEIC Policies and Procedures Manual, EPA-330/9-78-001-R, May 1978, revised November 1984.
- 11. Federal Acquisition Regulation, Washington, DC: U.S. Government Printing Office (revised periodically).
- 12. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, Interim Final, U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive NO. 9355.3-01.
- 13. Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potential Responsible Parties, U.S. EPA Office of Emergency and Remedial Response, EPA/540/G-90/001, April 1990.
- 14. Guidance on Expediting Remedial Design and Remedial Actions, EPA/540/G-90/006, August 1990.
- 15. Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites, U.S. EPA Office of Emergency and Remedial Response (DRAFT), OSWER Directive No. 9283.1-2.
- 16. Guide for Conducting Treatability Studies Under CERCLA, U.S. EPA, Office of Emergency and Remedial Response, Prepublication version.
- 17. Guide to Management of Investigation-Derived Wastes, U.S. EPA, Office of Solid Waste and Emergency Response, Publication 9345.3-03FS, January 1992.
- 18. Guidelines and Specifications for Preparing Quality Assurance Project Plans, U.S. EPA, Office of Research and Development, Cincinnati, OH, QAMS-004/80, December 29, 1980.
- 19. Health and Safety Requirements of Employees Employed in Field Activities, U.S. EPA, Office of Emergency and Remedial Response, July 12, 1982, EPA Order No. 1440.2.
- 20. Interim Guidance on Compliance with Applicable of Relevant and Appropriate Requirements, U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.
- 21. Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans, U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.
- 22. Methods for Evaluating the Attainment of Cleanup Standards: Vol. 1, Soils and Solid Media, February 1989, EPA 23/02-89-042; vol. 2, Ground water (Jul 1992).
- 23. National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule, Federal Register 40 CFR Part 300, March 8, 1990.
- 24. NIOSH Manual of Analytical Methods, 2nd edition. Volumes I-VII for the 3rd edition, Volumes I and II, National Institute of Occupational Safety and Health.
- 25. Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, National Institute of Occupational Safety and Health/Occupational Health and Safety Administration/United States Coast Guard/Environmental Protection Agency, October 1985.

- 26. Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions, February 19, 1992, OSWER Directive 9355.7-03.
- 27. Procedure for Planning and Implementing Off-Site Response Actions, Federal Register, Volume 50, Number 214, November 1985, pages 45933-45937.
- 28. Procedures for Completion and Deletion of NPL Sites, U.S. EPA, Office of Emergency and Remedial Response, April 1989, OSWER Directive No. 9320.2-3A.
- 29. Quality in the Constructed Project: A Guideline for Owners, Designers and Constructors, Volume 1, Preliminary Edition for Trial Use and Comment, American Society of Civil Engineers, May 1988.
- 30. Remedial Design and Remedial Action Handbook, U.S. EPA, Office of Emergency and Remedial Response, June 1995, OSWER Directive No. 9355.5-22.
- 31. Revision of Policy Regarding Superfund Project Assignments, OSWER Directive No. 9242.3-08, December 10, 1991. [Guidance, p. 2-2]
- 32. Scoping the Remedial Design (Fact Sheet), February 1995, OSWER Publ. 9355-5-21 FS.
- 33. Standard Operating Safety Guides, U.S. EPA, Office of Emergency and Remedial Response, November 1984.
- 34. Standards for the Construction Industry, Code of Federal Regulations, Title 29, Part 1926, Occupational Health and Safety Administration.
- 35. Standards for General Industry, Code of Federal Regulations, Title 29, Part 1910, Occupational Health and Safety Administration.
- 36. Structure and Components of 5-Year Reviews, OSWER Directive No. 9355.7-02, May 23, 1991. [Guidance, p. 3-5]
- 37. Superfund Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties, April 1990, EPA/540/G-90/001.
- 38. Superfund Remedial Design and Remedial Action Guidance, U.S. EPA, Office of Emergency and Remedial Response, June 1986, OSWER Directive No. 9355.0-4A.
- 39. Superfund Response Action Contracts (Fact Sheet), May 1993, OSWER Publ. 9242.2-08FS.
- 40. TLVs-Threshold Limit Values and Biological Exposure Indices for 1987-88, American Conference of Governmental Industrial Hygienists.
- 41. Treatability Studies Under CERCLA, Final. U.S. EPA, Office of Solid Waste and Emergency Response, EPA/540/R-92/071a, October 1992.
- 42. USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis, U.S. EPA, Office of Emergency and Remedial Response, July 1988.
- 43. USEPA Contract Laboratory Program Statement of Work for Organic Analysis, U.S. EPA, Office of Emergency and Remedial Response, February 1988.
- 44. User's Guide to the EPA Contract Laboratory Program, U.S. EPA, Sample Management Office, August 1982.
- 45. Value Engineering (Fact Sheet), U.S. EPA, Office of Solid Waste and Emergency Response, Publication 9355.5-03FS, May 1990.
- 46. Presumptive Remedies: Policy and Procedures, U.S. EPA, Office of Solid Waste and Emergency Response, Directive 9355.0-47FS, EPA 540-F-93-047, PB 93-963345, September, 1993.
- 47. Presumptive Remedies for Soils, Sediments, and Sludges at Wood Treater Sites, U.S. EPA, Office of Solid Waste and Emergency Response, Directive 9200.5-162, EPA/540/R-95/128, PB 95-963410, November, 1995
- 48. Presumptive Response Strategy and Ex-Situ Treatment Technologies for Contaminated Groundwater at CERCLA Sites, U.S. EPA, Office of Solid Waste and Emergency Response, Directive 9283.1-12, EPA 5401R/023, June, 1996.
- 49. Presumptive Response Strategy and Ex-Situ Treatment Technologies for Contaminated Groundwater at CERCLA Sites, U.S. EPA, Office of Solid Waste and Emergency Response, Directive 9283.1-12, EPA 5401R/023, June, 1996.